

*SOLANUM LOBBIANUM* BITTER, A LITTLE KNOWN COLOMBIAN  
TUBER BEARING SPECIES

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ABSTRACT

New information and an expanded description are provided for the seldom collected *Solanum lobbianum*.

KEY WORDS: Solanaceae, *Solanum*, taxonomy

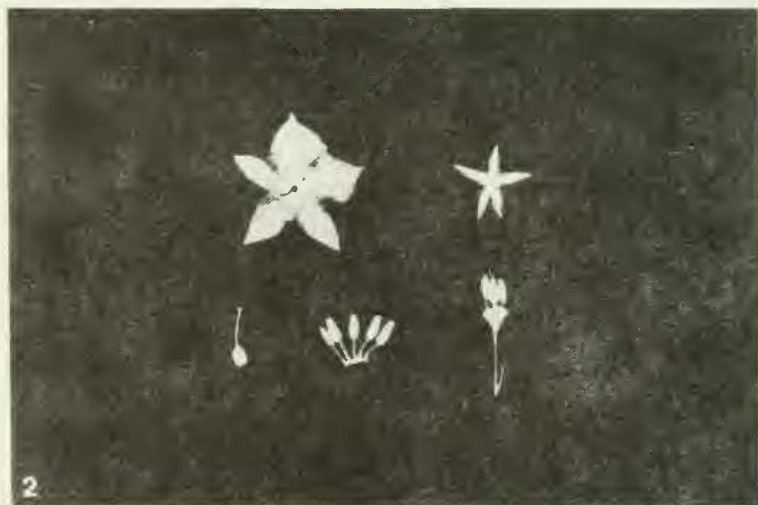
*Solanum lobbianum* was described by George Bitter in 1913 (Fedde Repert. Sp. Nov. 12:446.). The type of this wild tuber bearing potato species was collected circa 1856 by William Lobb, a British plant collector. However, Lobb failed to record his collection number, date of collection, and the exact location where collected. Its type specimen was housed in the *Hookerianum Herbarium* in 1867 with the simple label notation "Colombia, Lobb." This specimen, which represents the holotype of the species, is currently housed in Kew Gardens Herbarium in London.

In 1918, another collection of *Solanum lobbianum* was made by *M. T. Dawe*, under his number 742. This collection has three specimens which were distributed to herbaria at Kew, The New York Botanical Garden, and the National Herbarium of the United States of North America (Smithsonian). Dawe's specimens bear only a brief note indicating that they had been collected in "Ruiz, Colombia, 3000 m alt."

During my explorations in Colombia in July 1980—nearly 124 years after Lobb's first collection—I found *Solanum lobbianum* while ascending the volcano of El Ruiz, between Las Juntas and Termales, 2800-3200 m alt., Department of Manizales.

Although the original diagnosis of *Solanum lobbianum* is extensive and detailed, it was based on only one specimen. Here, I will give some complementary data that could be useful for a better understanding of this species.

Plant (15-)25-30(-40) cm tall, slightly rossulate at the base when growing in the open field under exposed conditions, densely pubescent, stoloniferous



1. El Ruiz Peak, near 5000 m alt., Colombia. Frontground in the low 3200 m alt., habitat of Solanum lobbianum.

2. Flower dissection of Solanum lobbianum

and tuber bearing. Stem usually branched, 3-5 mm in diameter, sparsely pilose, narrowly winged, wings straight and barely distinguishable, internodes (1.0-)2.5-4.5(-5.5) cm long. Leaves imparipinnate, 9.5-20.0 cm long by 6.5-16.0 cm wide, 3-5 pairs of leaflets, 3-8 pairs of sessile interjected leaflets, from two to three sizes, small suborbicular to orbicular; lateral leaflets widely elliptic to elliptic lanceolate, first and second upper pair 2.5-4.5 cm long by 1.7-2.5 cm wide, 2-7 mm petiolulate, obtuse or subacuminate apex, petiolules sometimes with 1-2 small interjected leaflets; the lower pair of leaflets much smaller and sessile. Pseudostipular leaves widely elliptic-lanceolate with the apex very obtuse, small, 7.0 x 5.0 mm. Inflorescence cymose, 7-9 flowered. Peduncle 3.5-7.0 cm long, 1.5-2.0 mm in diameter toward base, pilose as the pedicels, calyx and flower buds; hairs multicellular of unequal length sparsely alternated with short glandular tetralobed hairs; pedicels 18-22 mm long, articulated slightly above the middle. Calyx 7-11 mm in diameter, lobes narrowly lanceolate, acute. Corolla very pale violet or light violet-lilac with whitish acumens, rotate pentagonal or pentagonal, 1.6-2.0 cm in diameter, acumens densely pilose. Filaments 1.0-1.5 mm long, glabrous; anthers widely elliptic-lanceolate, small, 4 mm long. Style 7.0 mm long, covered with little prominent papillae toward the one-third of the basis; stigma shortly conical-capitate, small. Ovary conical. Fruit long conical.

*Solanum lobbianum* is a typical species of the series *Conicibaccata*, with a chromosome number of  $2n=48$ . Although *S. lobbianum* has some similarity with *S. bukasovii* Juz., and *S. brevicaule*, as Correll states (*The Potatoe and its Wild Relatives*, Texas Research Foundation, 1962.), it differs from these and from all known tuber bearing species because of its conspicuous pubescence, silvery-white hairs noticeably longer on the stem, calyx, and flower buds, peduncles shorter and thinner than in *S. bukasovii*, pedicels slender, corolla small (2.0-2.5 cm in diam.), very pale violet, fruits long conical. Contrary to *S. bukasovii* or *S. lobbianum* f. *multidissectum* (Hawkes) Correll, which in my opinion is only a variety of *S. bukasovii*, the corolla of *S. bukasovii* is pentagonal, larger (up to 4 cm or more in diameter), dark blue violet or dark purple, flower buds are not too densely pilose, nor are the hairs very long; fruit globose to ovate and its chromosome number is  $2n=24$ .

Specimens Examined: COLOMBIA. Dept. Manizales: Heights of Las Juntas, 2800 m alt., July 22, 1980, *C. Ochoa 14109* (CIP,COL,GH). Above Termals, ascending towards volcano Ruiz, 3200 m alt., July 22, 1980, *C. Ochoa 14110* (CIP,COL,GH). Indefinite: *Lobb s.n.* (HOLOTYPE: K). "Ruiz, 3000 m alt.", 1918, *M.T. Dawe 742* (K,NY,US).